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Year 4 numeracy performance by gender

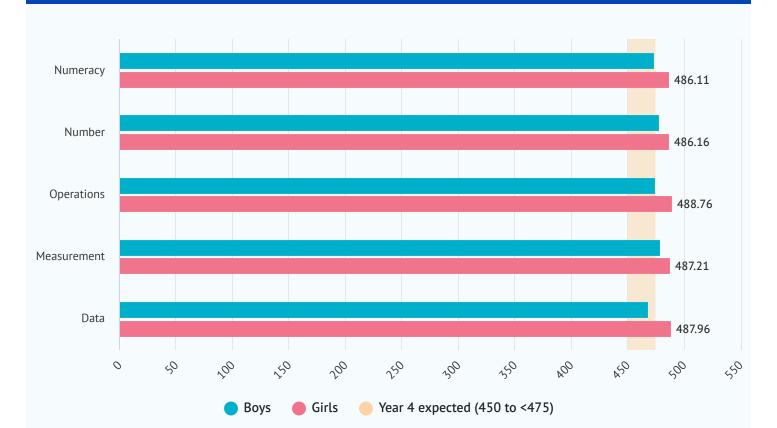
A roughly equal number of the scores of year four girls and boys was analysed in the PILNA 2021 numeracy assessment: 10,293 year four girls' scores and 10,599 year four boys' scores.

Figure RNF4.4 shows the average numeracy performance of year four students by gender.



Figure RNF4.4

Year 4 Numeracy mean performance in domain & strands by gender



Category	Boys	Girls
Numeracy	473.03	486.11
Number	477.61	486.16
Operations	473.45	488.76
Measurement	478.36	487.21
Data	467.83	487.96

Mean performance of Year 4 students in number, operations, measurement & geometry, data, by gender

Year four girls scored higher than year four boys in all numeracy areas, including the overall numeracy score.

This was consistent with the trend across previous two PILNA cycles, 2015 and 2018, as seen in Figure RNF4.5, when year four girls, on average, scored higher than year four boys in all numeracy areas, including the overall numeracy score.



Further statistical testing needs to be performed to understand if these differences in scores are significant or the result of chance or outliers.

Figure RNF4.5



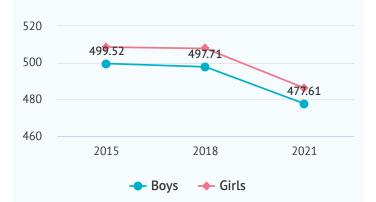
Year	Boys	Girls
2015	501.31	508.7
2018	499	509.87
2021	473.03	486.11

Mean performance of Year 4 students in numeracy, by gender, over time 2015, 2018, 2021



Figure RNF4.6

Year 4 Number mean performance by gender over time

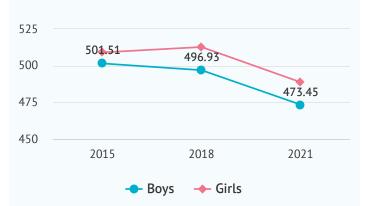


Year	Boys	Girls
2015	499.52	508.49
2018	497.71	507.74
2021	477.61	486.16

Mean performance of Year 4 students in number strand, by gender, over time 2015, 2018, 2021

Figure RNF4.7

Year 4 Operations mean performance by gender over time



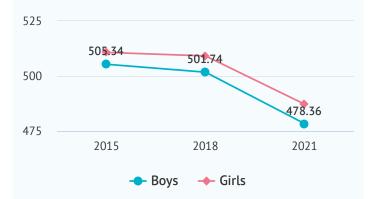
Year	Boys	Girls
2015	501.51	509.05
2018	496.93	512.72
2021	473.45	488.76

Mean performance of Year 4 students in operations strand, by gender, over time 2015, 2018, 2021



Figure RNF4.8

Year 4 Measurement & Geometry mean performance by gender over time

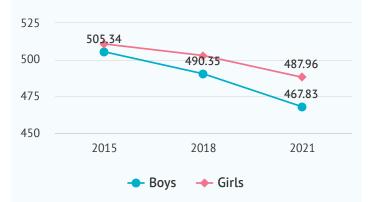


Year	Boys	Girls
2015	505.34	510.72
2018	501.74	509.13
2021	478.36	487.21

Mean performance of Year 4 students in measurement & geometry strand, by gender, over time 2015, 2018, 2021

Figure RNF4.9

Year 4 Data & Chance mean performance by gender over time



Year	Boys	Girls
2015	505.34	510.72
2018	490.35	502.81
2021	467.83	487.96

Mean performance of Year 4 students in data & chance strand, by gender, over time 2015, 2018, 2021